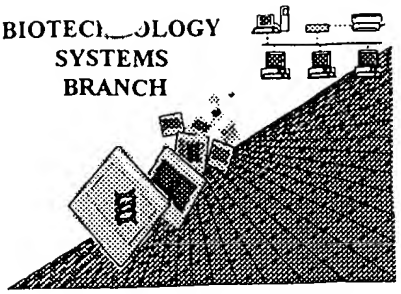
BIOTECHNOLOGY SYSTEMS BRANCH



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06/21
H5 1/2

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/723,326

Source: OIPE

Date Processed by STIC: 5-23-01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

Raw Sequence Listing Error Summary

ERROR DETECTED **SUGGESTED CORRECTION** **SERIAL NUMBER:** 09/723,326

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
4	Non-ASCII	The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
11	✓ Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

OIPE

RAW SEQUENCE LISTING DATE: 05/23/2001
PATENT APPLICATION: **US/09/723,326** TIME: 10:32:47

Input Set : **A:\09723326.txt**
Output Set: **C:\CRF3\05232001\I723326.raw**

```
      3 <110> APPLICANT: WEBSTER, Keith A.
      5 <120> TITLE OF INVENTION: A Molecular Switch for Regulating Mammalian Gene Expression
      7 <130> FILE REFERENCE: 70373/268461 - UM99-29
      9 <140> CURRENT APPLICATION NUMBER: US 09/723,326
     10 <141> CURRENT FILING DATE: 2000-11-28
     12 <150> PRIOR APPLICATION NUMBER: US 60/171,597
     13 <151> PRIOR FILING DATE: 1999-12-23
     15 <160> NUMBER OF SEQ ID NOS: 16
     17 <170> SOFTWARE: PatentIn version 3.0
     19 <210> SEQ ID NO: 1
     20 <211> LENGTH: 21
     21 <212> TYPE: DNA
C--> 22 <213> ORGANISM: Artificial
     24 <220> FEATURE:
     25 <223> OTHER INFORMATION: oligonucleotide
     27 <400> SEQUENCE: 1
     28 tgtcacgtcc tgcacgacgt a                                          21
     31 <210> SEQ ID NO: 2
     32 <211> LENGTH: 22
     33 <212> TYPE: DNA
C--> 34 <213> ORGANISM: Artificial
     36 <220> FEATURE:
     37 <223> OTHER INFORMATION: oligonucleotide
     39 <400> SEQUENCE: 2
     40 cttcagcacc gcggacagtg cc                                         22
     43 <210> SEQ ID NO: 3
     44 <211> LENGTH: 22
     45 <212> TYPE: DNA
C--> 46 <213> ORGANISM: Artificial
     48 <220> FEATURE:
     49 <223> OTHER INFORMATION: oligonucleotide
     51 <400> SEQUENCE: 3
     52 tgtccattcc tgcacgacgt ac                                         22
     55 <210> SEQ ID NO: 4
     56 <211> LENGTH: 22
     57 <212> TYPE: DNA
C--> 58 <213> ORGANISM: Artificial
     60 <220> FEATURE:
     61 <223> OTHER INFORMATION: oligonucleotide
     63 <400> SEQUENCE: 4
     64 cttcagcacc gcttacagtg cc
     67 <210> SEQ ID NO: 5
     68 <211> LENGTH: 43
     69 <212> TYPE: DNA
C--> 70 <213> ORGANISM: Artificial
     72 <220> FEATURE:
     73 <223> OTHER INFORMATION: oligonucleotide
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Does Not Comply
Corrected Diskette Needed
global error

Circled <223> response must be more specific. What is the source of the genetic material in the artificial sequences? See #11 on the Error Summary Sheet.

Note: This error is indicated throughout the sequence listing. please review and correct.

RAW SEQUENCE LISTING DATE: 05/23/2001
PATENT APPLICATION: **US/09/723,326** TIME: 10:32:47

Input Set : **A:\09723326.txt**
Output Set: **C:\CRF3\05232001\I723326.raw**

75 <400> SEQUENCE: 5
76 cttcagcacc gcggacagtg cctgtcacgt cctgcacgac gta 43
79 <210> SEQ ID NO: 6
80 <211> LENGTH: 86
81 <212> TYPE: DNA
C--> 82 **<213> ORGANISM: Artificial**
84 <220> FEATURE:
85 <223> OTHER INFORMATION: oligonucleotide
87 <400> SEQUENCE: 6
88 cttcagcacc gcggacagtg cctgtcacgt cctgcacgac gtacttcagc accgcggaca 60
90 gtgcctgtca cgtcctgcac gacgta 86
93 <210> SEQ ID NO: 7
94 <211> LENGTH: 123
95 <212> TYPE: DNA
C--> 96 **<213> ORGANISM: Artificial**
98 <220> FEATURE:
99 <223> OTHER INFORMATION: oligonucleotide
101 <400> SEQUENCE: 7
102 cttcagcacc gcggacagtg cctgtcacgt cctgcacgac ttcagcaccg cggacagtgc 60
104 ctgtcacgtc ctgcacgact tcagcaccgc ggacagtgcc tgtcacgtcc tgcacgacgg 120
106 tac 123
109 <210> SEQ ID NO: 8
110 <211> LENGTH: 33
111 <212> TYPE: DNA
C--> 112 **<213> ORGANISM: Artificial**
114 <220> FEATURE:
115 <223> OTHER INFORMATION: oligonucleotide
117 <400> SEQUENCE: 8
118 cttcagcacc gcggacagtc acgtcctgca cga 33
121 <210> SEQ ID NO: 9
122 <211> LENGTH: 129
123 <212> TYPE: DNA
C--> 124 **<213> ORGANISM: Artificial**
126 <220> FEATURE:
127 <223> OTHER INFORMATION: oligonucleotide
129 <400> SEQUENCE: 9
130 cttcagcacc gcttacagtg cctgtcacgt cctgcacgac gtacttcagc accgcttaca 60
132 gtgcctgtca cgtcctgcac gacgtacttc agcaccgctt acagtgcctg tcacgtcctg 120
134 cacgacgta 129
137 <210> SEQ ID NO: 10
138 <211> LENGTH: 132
139 <212> TYPE: DNA
C--> 140 **<213> ORGANISM: Artificial**
142 <220> FEATURE:
143 <223> OTHER INFORMATION: oligonucleotide
145 <400> SEQUENCE: 10
146 cttcagcacc gcggacagtg cctgtccatt cctgcacgac gtaccttcag caccgcggac 60
148 agtgcctgtc cattcctgca cgacgtacct tcagcaccgc ggacagtgcc tgtccattcc 120
150 tgcacgacgt ac 132

RAW SEQUENCE LISTING DATE: 05/23/2001
PATENT APPLICATION: **US/09/723,326** TIME: 10:32:47

Input Set : **A:\09723326.txt**
Output Set: **C:\CRF3\05232001\I723326.raw**

153 <210> SEQ ID NO: 11
154 <211> LENGTH: 116
155 <212> TYPE: DNA
C--> 156 **<213> ORGANISM: Artificial**
158 <220> FEATURE:
159 <223> OTHER INFORMATION: oligonucleotide
161 <400> SEQUENCE: 11
162 cttcagcacc gcggacagtt gaggggactt tcccaggctt cagcaccgcg gacagttgag 60
164 gggactttcc caggcttcag caccgcggac agttgagggg actttcccag gcgtac 116
167 <210> SEQ ID NO: 12
168 <211> LENGTH: 116
169 <212> TYPE: DNA
C--> 170 **<213> ORGANISM: Artificial**
172 <220> FEATURE:
173 <223> OTHER INFORMATION: oligonucleotide
175 <400> SEQUENCE: 12
176 cttcagcacc gcttacagtt gaggggactt tcccaggctt cagcaccgct tacagttgag 60
178 gggactttcc caggcttcag caccgcttac agttgagggg actttcccag gcgtac 116
181 <210> SEQ ID NO: 13
182 <211> LENGTH: 199
183 <212> TYPE: DNA
C--> 184 **<213> ORGANISM: Artificial**
186 <220> FEATURE:
187 <223> OTHER INFORMATION: oligonucleotide
189 <400> SEQUENCE: 13
190 cttcagcacc gcggacagtt gacacgatca cctcccatta aggagagaga tctccttcag 60
192 caccgcggac agttgacacg atcacctccc attaaggaga gagatctcct tcagcaccgc 120
194 ggacagttga cacgatcacc tcccattaag gagagagatc tccttcagca ccgcggacag 180
196 ttgaggggac tttcccagg 199
199 <210> SEQ ID NO: 14
200 <211> LENGTH: 162
201 <212> TYPE: DNA
C--> 202 **<213> ORGANISM: Artificial**
204 <220> FEATURE:
205 <223> OTHER INFORMATION: oligonucleotide
207 <400> SEQUENCE: 14
208 cttcagcacc gcggacagtt gagcttcggg gcttttgcac tcgtcccggc tctacttcag 60
210 caccgcggac agttgagctt cggggctttt gcactcgtcc cggctctact tcagcaccgc 120
212 ggacagttga gcttcggggc ttttgcactc gtcccggctc ta 162
215 <210> SEQ ID NO: 15
216 <211> LENGTH: 52
217 <212> TYPE: DNA
C--> 218 **<213> ORGANISM: Artificial**
220 <220> FEATURE:
221 <223> OTHER INFORMATION: oligonucleotide
223 <400> SEQUENCE: 15
224 ctggccttat ctccggctgc acgttgcctg ttggtgacta ataacacaat aa 52
227 <210> SEQ ID NO: 16
228 <211> LENGTH: 162

RAW SEQUENCE LISTING DATE: 05/23/2001
PATENT APPLICATION: **US/09/723,326** TIME: 10:32:47

Input Set : **A:\09723326.txt**
Output Set: **C:\CRF3\05232001\I723326.raw**

229 <212> TYPE: DNA
C--> **230 <213> ORGANISM: Artificial**
232 <220> FEATURE:
233 <223> OTHER INFORMATION: oligonucleotide
235 <400> SEQUENCE: 16
236 cttcagcacc gcggacagtt gacacgatca cctcccatta aggagagaga tctccttcag 60
238 caccgcggac agttgacacg atcacctccc attaaggaga gagatctcct tcagcaccgc 120
240 ggacagttga cacgatcacc tcccattaag gagagagatc tc 162

VERIFICATION SUMMARY DATE: 05/23/2001
PATENT APPLICATION: US/09/723,326 TIME: 10:32:48

Input Set : A:\09723326.txt
Output Set: C:\CRF3\05232001\I723326.raw

L:22 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:34 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:46 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:58 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:70 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:82 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:96 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:112 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:124 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:140 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:156 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:170 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:184 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:202 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:218 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
L:230 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16